

Before the
Federal Communications Commission
Washington, D.C. 20554

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In the Matter of)
)
Deployment of Wireline Services Offering)
Advanced Telecommunications Capability)

CC Docket No. 98-147

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

REPLY COMMENTS OF U S WEST COMMUNICATIONS, INC.

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SUMMARY

In their opening comments, most CLECs argue that the Commission has authority to require line sharing, and that compulsory line sharing is necessary to remedy a “DSL price squeeze” that afflicts CLECs that choose to provide only data services over unbundled loops. They are wrong as a matter of law, fact, and public policy. In the first place, as many commenters recognize, there is no legal or factual basis for mandating line sharing. Section 251(c)(3) is inapplicable both because a “data functionality” is not a network element subject to unbundling and, even if it were, facilities used *only* to provide advanced services are outside the scope of section 251(c)(3). In any event, the record shows that line sharing does not meet the impairment standard in section 251(d)(2) of the Act.

CLECs’ assertions of competitive disadvantage rest on the false premise that only incumbent LECs can provide voice and data services over a single loop. In fact, there is no legitimate reason why a CLEC cannot use a loop for multiple purposes, in the same manner as an incumbent LEC. If a data-focused CLEC finds it disadvantageous for its customers to bear the cost of a second line dedicated to data services, that CLEC may use unbundled loops to provide data *and* voice services — either on its own (using packet-switched technology that obviates the need to invest in circuit-switched equipment), or in partnership with another carrier.

This equality of opportunity also undermines the alternative suggestion of some CLECs that the Commission should require line sharing as a remedy for alleged price discrimination under sections 201 and 202 of the Act. There simply is no discrimination for the Commission to rectify. Nor is there any merit to the suggestion of a few CLECs that section 706 authorizes the Commission to require line sharing as a means of boosting CLEC entry into the broadband market. That provision militates strongly *against* line sharing, as it calls for

“remov[ing] barriers to infrastructure investment,” Act § 706 (emphasis added), rather than imposing new ones. Moreover, any requirement that forces incumbent LECs to bear additional unbundling (or related) obligations would be flatly inconsistent with the Commission’s analysis of section 706 in its recent *Advanced Services Report*, where the Commission refrained from regulating cable operators based on the existence of substantial broadband competition.

Incumbents and CLECs alike also recognize that line sharing would cause formidable policy and operational problems. Permitting CLECs to appropriate control over a loop that an incumbent LEC must use to provide voice service would threaten serious degradation of that voice service. A line-sharing requirement also would distort investment incentives and chill innovation, require costly OSS modifications, create intractable pricing and cost-allocation difficulties, undermine residential voice competition, and violate the principle of competitive neutrality.

Finally, the Commission should reject CLEC invitations to micromanage the development of spectrum compatibility standards and management policies. Most commenters agree that industry groups such as the T1E1.4 working group are fair and open, and are in the best position to develop standards that reflect a consensus. The Commission in particular should refrain from establishing any requirements regarding the replacement of existing AMI T1 plant. The market, not regulators, should dictate the timing of plant upgrades. And forced replacement of T1 lines could harm consumers by causing service outages or precluding access to advanced services entirely where no other type of facility is both available and cost effective.

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REPLY COMMENTS OF U S WEST COMMUNICATIONS, INC.

U S WEST Communications, Inc. ("U S WEST") submits this reply to the comments filed in the above-captioned docket.

In their opening comments, most CLECs argue that the Commission has authority to require line sharing, and that compulsory line sharing is necessary to remedy a "DSL price squeeze" that afflicts CLECs that choose to provide only data services over unbundled loops. As shown in these reply comments, they are wrong as a matter of law, fact, and public policy.

In the first place, as many commenters recognize, there is no legal or factual basis for mandating line sharing. Section 251(c)(3) is inapplicable, because there is no preexisting "data functionality" within a copper loop for the Commission to unbundle as a network element. Even if a "data functionality" could be characterized as an element of the incumbent's network (as opposed to something a CLEC itself creates on an unbundled loop), the Commission has recently acknowledged to the D.C. Circuit that it has not adequately demonstrated that the DSL service CLECs seek to provide over such an "element" is a local exchange service subject to section 251(c). In any event, the record shows that line sharing does not meet the standard for unbundling set forth in section 251(d)(2) of the Act. CLECs themselves demonstrate that competition is not impaired by touting their success in rolling out xDSL services *in the absence of line sharing*.

While data-focused CLECs protest that line sharing is critical to their business plans, their claims of impairment overlook the fact that a competitor's particular strategy is not the proper focus of the impairment analysis required under section 251(d)(2). Moreover, their arguments rest on the false premise that only incumbent LECs can provide voice and data services over a single loop. In fact, there is no legitimate reason why a CLEC cannot use a loop for multiple purposes, in the same manner as an incumbent LEC. If a data-focused CLEC finds it disadvantageous for its customers to bear the cost of a second line dedicated to data services, that CLEC may use unbundled loops to provide data *and* voice services — either on its own, or in partnership with another carrier. And, contrary to the concern expressed in the FNPRM (§ 99), a CLEC providing voice services need not invest in circuit-switched technology: Several leading CLECs say they are poised to introduce packet-switched “voice over DSL” offerings.^{1/} As the Commission has recognized, a CLEC that *chooses* not to provide voice services or to team with another CLEC for that purpose *voluntarily* sacrifices some of the loop's revenue-generating potential — and thus has no basis to complain of a “price squeeze.”^{2/}

This equality of opportunity also undermines the alternative suggestion of some CLECs that the Commission should require line sharing as a remedy for alleged price discrimination under sections 201 and 202 of the Act. There simply is no discrimination for the Commission to rectify.

^{1/} See *Covad Successfully Executes Trials of Combined Voice and Data Over DSL*, June 7, 1999 (available at www.covad.com/about/press_releases/press_060799.html); *Rhythms and MCI WorldCom Complete Unprecedented Voice and Data Over DSL Test*, June 4, 1999 (attached to Rhythms NetConnections as Exh. A).

^{2/} See *GTE Telephone Operating Cos.*, Memorandum Opinion and Order, 13 FCC Rcd 22466 ¶ 31 (1998) (“*GTOC Order*”).

Nor is there any merit to the suggestion of a few CLECs that section 706 authorizes the Commission to require line sharing as a means of boosting CLEC entry into the broadband market. That provision militates strongly *against* line sharing, because it calls for “*remov[ing]* barriers to infrastructure investment,” Act § 706 (emphasis added), rather than imposing new ones. A line-sharing requirement would dramatically *slow* the deployment of new loop technology. Moreover, even if section 706 in some circumstances could warrant imposing a regulatory burden, doing so here would be flatly inconsistent with the Commission’s approach to cable modem unbundling in its recent *Advanced Services Report*. The Commission decided in that proceeding *not* to grant competitive access to broadband facilities exclusively controlled by cable operators — which provide advanced services to far more customers than incumbent LECs — because “multiple methods of increasing bandwidth are or soon will be made available to a broad range of customers.”^{3/} If such competition is sufficient to defeat calls for access to broadband cable-modem facilities, it certainly warrants rejection of the line-sharing proposal at issue here: Unlike incumbent cable operators, incumbent LECs seeking to enter this new market *already* must give competitors unbundled access to their basic transmission facilities at cost-based rates.

Incumbents and CLECs alike also recognize that line sharing would cause formidable policy and operational problems. Permitting multiple carriers to provide service over a single loop would threaten serious degradation of existing voice services, on which consumers

^{3/} See *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, Report, CC Docket No. 98-146, FCC 99-5, ¶ 101 (rel. Feb. 2, 1999) (“*Advanced Services Report*”).

have come to rely. While industry groups are developing spectrum compatibility standards designed to minimize interference on *adjacent* loops, they have not addressed the more serious risk of interference from a source within a single loop. Even if standards were developed, CLECs would have a substantial incentive not to comply with them, because their primary goal would be to extend the reach of their data services. Yet voice customers would not likely have sufficient information to attribute problems with the voice signal to the data provider. A line-sharing requirement also would distort investment incentives and chill innovation, require costly OSS modifications, create intractable pricing and cost-allocation difficulties, undermine residential voice competition, and violate the principle of competitive neutrality.

None of the above problems with line sharing is mitigated or otherwise affected by the recent agreement by SBC and Ameritech to permit line sharing (if and when it becomes feasible) in order to obtain the Commission's approval of their merger. The proposed conditions, as well as those carriers' comments in this proceeding, make clear that line sharing "greatly exceed[s] the market-opening duties imposed by Congress."^{4/} Mandating line sharing for the entire industry in reliance on these carriers' negotiated condition — rather than as a result of reasoned decision making — would violate the Administrative Procedure Act.

Finally, the Commission should reject CLEC invitations to micromanage the development of spectrum compatibility standards and management policies. Most commenters agree that industry groups such as the T1E1.4 working group are fair and open, and are in the best position to develop standards that reflect a consensus. The Commission in particular should refrain from establishing any requirements regarding the replacement of existing AMI T1 plant.

^{4/} Letter of Richard Hetke and Paul Mancini to Magalie Roman Salas at 3 (dated July 1, 1999)

The market, not regulators, should dictate the timing of plant upgrades. And forced replacement of T1 lines could harm consumers by causing service outages or precluding access to advanced services entirely where no other type of facility is both available and cost effective.

I. OTHER COMMENTERS AGREE THAT THE COMMISSION LACKS AUTHORITY TO MANDATE LINE SHARING UNDER THE ACT.

Proponents of line sharing advance three purported legal justifications for the NPRM's proposal. They assert that the Act authorizes the Commission to (1) unbundle loop spectrum under section 251(c)(3); (2) order line sharing as a special access service to remedy discriminatory incumbent LEC xDSL pricing that violates sections 201 and 202; and (3) order line sharing pursuant to section 706 to facilitate deployment of broadband services. None of these theories has any merit.

A. Line Sharing May Not Be Required under an Unbundling Theory.

As U S WEST explained in its comments (U S WEST at 16-17), the Commission may not require incumbent LECs to unbundle a "data functionality" within the loop, because there is no such element. In the form of line sharing favored by CLECs, the CLEC's attachment of its *own* DSLAM would generate the channels within the loop. Such line sharing thus would result in the incumbent LEC's use of a CLEC-created voice channel, not the CLEC's lease of the incumbent's data channel. Other commenters recognize that any attempt to characterize line sharing as an unbundling requirement fails at the threshold, because line sharing does not entail the provision of access to any element within the incumbent's network.^{5/}

^{5/}

See Bell Atlantic at 7-8; GTE at 18.

Section 251(c)(3) is inapplicable for the additional reason that, even if a “data functionality” could be considered a network element, the DSL service CLECs seek to provide over such an “element” is not a local exchange service subject to section 251(c). As the Commission explained in the *Advanced Services Order*, the applicability of the Act’s market-opening “obligations under section 251 turn[s] on whether the carrier is providing ‘telephone exchange service’ or ‘exchange access’” — *i.e.*, whether a carrier is providing local exchange service.^{6/} A facility — such as a so-called “data channel” to which CLECs seek unbundled access — that is used only to provide *advanced* services is *not* used to provide telephone exchange service or exchange access, and therefore is *not* subject to unbundling.^{7/} The Commission recently acknowledged the strength of this argument in requesting a remand from the United States Court of Appeals for the D.C. Circuit to consider whether section 251(c) applies at all in the advanced services context.^{8/} The Commission represented to the Court that U S WEST (and other incumbent LECs) would not be prejudiced by a remand because the Commission has not ordered the unbundling of any network element used in the provision of

^{6/} *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 24011, 24031 ¶ 38 (1998) (“*Advanced Services Order*”).

^{7/} *See generally* Brief for Petitioner (filed May 17, 1999) in *U S WEST Communications, Inc. v. FCC*, No. 98-1410 (D.C. Cir.). The mere fact that a carrier provides local exchange service as an incumbent LEC does not mean that *all* of its telecommunications services are subject to incumbent LEC regulation. For example, even though GTE and Sprint are the incumbent LECs in some service areas, competitors cannot obtain unbundled access to the elements of Sprint’s long-distance and international networks under section 251(c)(3), or resale discounts on GTE’s nationwide Internet backbone under section 251(c)(4), because these are not services provided by Sprint or GTE in their capacities as “local exchange carriers.”

^{8/} *See* Motion of Federal Communications Commission for Remand To Consider Issues (filed June 22, 1999) in *U S WEST Communications, Inc. v. FCC*, No. 98-1410 (D.C. Cir.).

advanced services.^{9/} Plainly, any order requiring line sharing pursuant to section 251(c)(3) would undermine that assertion and would be inconsistent with the Commission's acknowledgment that it has not yet adequately addressed the threshold applicability of section 251(c)(3) to facilities used to provide advanced services.

1. Even If Loop Spectrum Were a Network Element and Advanced Services Facilities Were Subject to Section 251(c)(3), There Is No Basis in the Record for a Finding That Competition Would Be Impaired in the Absence of Line Sharing.

Even if the Commission were to rule that a "data functionality" qualifies as a network element and that section 251(c) applies in the advanced services context, a line-sharing requirement would be inconsistent with the impairment standard in section 251(d)(2). As BellSouth notes, the FNPRM does not define the impairment standard, much less propose how that standard should apply in this context.^{10/} In any event, the comments clearly demonstrate that CLECs are *not* impaired without line sharing, no matter how the Commission construes that term. AT&T points out that "incumbent LECs *and* CLECs are aggressively deploying advanced services to every corner of the country."^{11/} Several other competitive data providers bolster U S WEST's argument on this score (*see* U S WEST at 20-22) in describing their own service offerings; for example:

- NEXTLINK "currently operates facilities-based networks in 38 markets located in 14 states," NEXTLINK at 2;

^{9/} *Id.* at 7-8.

^{10/} *See* BellSouth at 8-10; *see also* Separate Statements of Commissioners Furchgott-Roth and Powell, attached to the FNPRM.

^{11/} AT&T at 20 (emphasis added).

- “NorthPoint has deployed service in more than 19 major markets comprising more than 40 cities nationally and is serving thousands of previously underserved consumers and small businesses with advanced telecommunications services,” NorthPoint at 4;
- “Rhythms is a premiere nationwide provider of high-speed data services, including DSL,” Rhythms at 1.
- Covad has plans to offer nationwide ADSL in 51 metropolitan areas by the end of 1999.^{12/}

Other commenters provide a wealth of further statistical and anecdotal evidence of CLECs’ success in deploying xDSL services *without* line sharing.^{13/}

In addition to copper loops, data providers are deploying a variety of other transmission technologies, including cable wires, wireless local loops, and satellites. Indeed, it was the presence of such competition that prompted the Commission to refrain from requiring cable operators to grant competitors access to their cable modem facilities in the *Advanced Services Report*.^{14/} The Commission now cannot arbitrarily ignore that competition in evaluating CLECs’ demands not only for access to unbundled loops, but also for the right to take whole loops and give back a portion they do not wish to use.^{15/}

2. CLEC Assertions of Impairment Are Baseless.

In contrast to this hard evidence of competition, some data-focused CLECs simply assert without basis that they are competitively disadvantaged in the absence of a line-sharing requirement, and thus that competition is “impaired.” ALTS’s comments are typical:

^{12/} See *Telecommunications Reports* at 37, April 5, 1999.

^{13/} See, e.g., BellSouth at 10-13; GTE at 20-22; SBC at 16-17.

^{14/} See *Advanced Services Report* at ¶ 101.

^{15/} See BellSouth at 12-13; GTE at 22; SBC at 15.

The CLEC trade association declares that “sharing of data and voice service over a single loop [is] available *only* from an ILEC.”^{16/} Similarly, NorthPoint declares that data-focused CLECs are “excluded” from the “efficiency” afforded by providing multiple services over a single loop.^{17/} The facts are plainly otherwise. As the Commission found in the *GTOC Order*, CLECs have “the same opportunity [as the incumbent LEC] to recover the costs of network elements from all of the services they offer using those facilities,” and a carrier that “*choos[es]* to offer only data service over a facility that is capable of carrying more” has only itself to blame for foregone revenues.^{18/} Indeed, ALTS itself concedes that “CLECs buying loop UNEs retain *complete freedom* to use the loop for voice, data or any combination of services their customers desire.”^{19/} Several commenters recognize this gaping hole in CLECs’ impairment argument.^{20/}

ALTS appears to fall back on the argument that, as a practical matter, CLECs cannot provide both voice and data services, because “there is no question that CLECs today lack the scale, ubiquity and market penetration to provide a ubiquitous alternative to ILEC local networks.”^{21/} But the Act does not require unbundling whenever competitors are unable

^{16/} ALTS at 11-12 (emphasis added). In a footnote, ALTS concedes that “CLECs can and do offer DSL service using line sharing,” *id.* at 12 n.27, thus contradicting its characterization of line sharing as something only incumbents can accomplish.

^{17/} NorthPoint at 3 (emphasis in original).

^{18/} *GTOC Order*, 13 FCC Rcd at 22482-83, ¶ 31.

^{19/} ALTS at 17 (emphasis added); *see also id.* at 12 n.27.

^{20/} *See* SBC at 17 (“CLECs are . . . just as able to unbundle the spectrum on [local loops], should they choose to do so, because they have the exclusive use of those lines.”); *see also* Bell Atlantic at 6; GTE at 23-24.

^{21/} ALTS at 12 n.27. Similarly, Network Access Solutions concedes that “a CLEC can reduce the loop costs applicable to its DSL offering if it uses the loops it obtains from the ILEC to provide its customers with both DSL service and exchange service,” but it asserts —

immediately to attain a *ubiquitous* presence. Rather, competition is impaired within the meaning of section 251(d)(2)(B) only if an efficient competitor is unable to *enter* the market.^{22/} There can be no finding of impairment simply because a CLEC with a particular business plan is unable to implement that plan — and certainly not where, as here, such a specialized CLEC can enter the market and compete but cannot immediately become ubiquitous.^{23/} In every new business venture, an entrant faces certain costs and obstacles, and its costs may in fact be higher than those of existing businesses until it achieves a sufficient scale.^{24/} Unbundling is intended to eliminate barriers of entry that go *beyond* the normal costs and obstacles new entrants in all markets must bear.^{25/}

In any event, “the agility and efficiency enjoyed by small, newly designed corporate structures often are more than sufficient to overcome any scale economies that might exist.”^{26/} As Professor Kahn has noted, these advantages include the selection of “more efficient technologies or network configuration” than those inherent in legacy circuit-switched networks

without basis — that “doing so does not permit CLECs to compete effectively with ILECs in the residential DSL market because of the market power of ILECs in the residential exchange market.” Network Access Solutions at 4.

^{22/} See Reply Comments of U S WEST, Inc. at 16-21, June 10, 1999, in *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98.

^{23/} *Id.*

^{24/} *Id.* at 17.

^{25/} *Id.* at 18.

^{26/} Ameritech Reply at Attachment A, pp. 19-20, June 10, 1999, in *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98; see also *id.* at 26-28 (refuting argument that a failure immediately to obtain a ubiquitous presence constitutes impairment).

constructed over many years.^{27/} Indeed, when CLECs are not asserting that their supposed inability to compete warrants unbundling, they are quick to claim superiority in comparison with incumbent LECs.^{28/}

Even if a CLEC's *voluntary decision* not to provide analog voice services were a relevant consideration in the impairment analysis, there are at least two reasons why data-focused CLECs' claims of disadvantage still would ring hollow. *First*, their rapid development of voice over DSL will obviate the asserted need for line sharing. The FNPRM tentatively concludes that line sharing is warranted because CLECs otherwise would have to invest in circuit-switched technology (which might become obsolete) in order to compete effectively. *See* FNPRM ¶ 99. By CLECs' own account, however, they are on the verge of offering *packet-switched* voice services. Covad, a leading proponent of line sharing, plans to introduce voice over DSL to residential customers *this year*,^{29/} Rhythms NetConnections also claims already to have developed the same capability.^{30/} As several other commenters recognize, the very real emergence of voice over DSL will make line sharing moot.^{31/}

^{27/} Bell Atlantic at Exh. C (Reply Declaration of Alfred E. Kahn, CC Docket 96-98, June 10, 1999) ("Kahn Reply Decl."), ¶ 4.

^{28/} *See, e.g.,* NorthPoint at 9.

^{29/} *See Covad Successfully Executes Trials of Combined Voice and Data Over DSL*, June 7, 1999 (available at www.covad.com/about/press_releases/press_060799.html).

^{30/} *See Rhythms and MCI WorldCom Complete Unprecedented Voice and Data Over DSL Test*, June 4, 1999 (attached to Rhythms NetConnections as Exh. A).

^{31/} *See, e.g.,* Ameritech at 4-5; BellSouth at 14-15; GTE at 24; SBC at 19-20; USTA at 25.

Covad asserts that “the need for line sharing is not obviated by the technical feasibility of voice-over-DSL.”^{32/} It suggests that entering residential voice markets — even by means of voice over DSL — would require it to “raise large sums of capital” and “build management teams and operating systems” (subject to intense competition for “first-rate telecommunications talent”), all of which would be “a time-consuming process.”^{33/} The need to do what any firm must to do to start a business and operate as an efficient competitor, however, does not amount to impairment, as Congress and the Supreme Court understood that term. Indeed, if the need to attract capital and talented personnel sufficed to demonstrate impairment, there plainly would be no “substance to the ‘necessary’ and ‘impair’ requirements,” as the Supreme Court required.^{34/} In any event, CLECs’ market capitalization and success in rolling out services shows that many already *have* amassed substantial capital and hired sufficient numbers of talented employees.^{35/}

Second, CLECs that do not want to provide voice service may simply partner with another carrier that does.^{36/} Rhythms and MCI WorldCom each tout the line-sharing alliance formed by the two carriers.^{37/} MCI WorldCom suggests that other carriers “may be interested in

^{32/} Covad at 34.

^{33/} *Id.* at 35-36 & n.59.

^{34/} *AT&T Corp. v. Iowa Utils. Bd.*, 119 S. Ct. 721, 736 (1999).

^{35/} For example, as of July 20, 1999, Covad had a market capitalization of more than \$4 billion, <www.nasdaq-amex.com/asp/quotes_full.asp?symbol=COVD%60&selected=COVD%60>, and the company seems to have had little difficulty assembling an “experienced management team.” Covad SEC Form 10-K for period ending Dec. 31, 1998 at 5.

^{36/} *See, e.g.*, Ameritech at 5; GTE at 23-24; U S WEST at 24.

^{37/} *See* Rhythms at 8-9; MCI WorldCom at 10.

providing voice services on a copper loop with another competitive LEC's data service."^{38/} Indeed, on July 21, 1999, Covad announced its formation of a strategic alliance with GST Telecommunications to provide integrated voice and data services.^{39/} A senior executive for Covad stated that, "[b]y working with aggressive, nimble voice CLECs such as GST, Covad plans to break the local phone service monopoly for voice services."^{40/} If line sharing *with the incumbent LEC* were mandated, such alliances would become unnecessary, and an important and acknowledged opportunity to boost residential voice competition would be squandered.

Covad's attempt to brush aside this alternative to investing in circuit-switched facilities again misses the mark. Covad complains that it would take time to "negotiate, consummate, and implement strategic partnerships with voice providers."^{41/} But Covad's announcement of its partnership with GST plainly demonstrates that such steps are not a legitimate barrier to entry. Nor could those "burdens" ever amount to "impairment" under the Act. Like the interpretation of section 251(d)(2) struck down by the Supreme Court, Covad's suggested construction erroneously assumes that "*any* increase in cost" constitutes impairment.^{42/}

^{38/} MCI WorldCom at 10. *See also* ALTS at 17 ("some [CLECs] will likely enter into joint ventures with DSL carriers for offering 'private label' DSL services on a line sharing basis").

^{39/} *Covad Announces First Alliance to Deliver Voice Over DSL Services to Small Business*, Press Release, Covad Communications, July 21, 1999.

^{40/} *Id.*

^{41/} Covad at 36.

^{42/} *Iowa Utils. Bd.*, 119 S. Ct. at 735.

The Court made clear that the term “impair” must refer to extraordinary costs and obstacles, not those that are simply attendant to being a new entrant in any market.^{43/}

* * *

In sum, CLECs are not impaired in the absence of line sharing, and line sharing therefore cannot be ordered pursuant to section 251(c)(3) (even assuming that the loop spectrum a CLEC would create with its own DSLAM is an element of the *incumbent’s* network and that advanced services facilities are subject to the unbundling requirements of the Act at all). The FNPRM tentatively concludes that nothing in the Act precludes states from ordering line sharing. FNPRM ¶ 98. Because states may adopt access regulations only to the extent that their regulations are consistent with the federal Act, 47 U.S.C. § 251(d)(3), states also lack authority to order line sharing under an unbundling rationale.^{44/}

B. Line Sharing May Not Be Ordered as a Remedy for Asserted “Discrimination.”

Some CLECs appear to recognize that mandatory line sharing cannot be justified under an unbundling theory. They urge, as an alternative, that the Act’s nondiscrimination provisions (47 U.S.C. §§ 201, 202) provide a basis for ordering line sharing.^{45/} The FNPRM makes no mention of ordering line sharing as a remedy for discrimination, however; instead, it relies solely on “the local competition provisions . . . [in] sections 251 and 252.”^{46/} Even apart

^{43/} See *id.* at 734-36.

^{44/} See Bell Atlantic at 9; Ameritech at 5.

^{45/} See, e.g., ALTS at 14-15; Covad at 14-18; Network Access Solutions at 11-12; NorthPoint at 29-30.

^{46/} FNPRM ¶ 98.

from the absence of notice of any purported antidiscrimination theory, there is simply no discrimination for the Commission to remedy here. As the Commission found in the *GTOC Order* and as noted above, CLECs have the same opportunities as incumbents to provide multiple services over a single loop.

Commenters advocating an antidiscrimination approach attempt to shoehorn line sharing into the “economic infeasibility” rationale that prompted the Commission to grant collocation rights and rate modifications for competitive access providers (“CAPs”) in the pre-1996 Act *Special Access* proceeding.^{47/} That proceeding is plainly inapposite. Before the *Special Access Order*, CAPs had been forced to pay high tariffed rates for the use of incumbent LECs’ interoffice facilities, and even CAPs that placed their equipment just outside a LEC central office had no choice but to pay full price (or to bypass LEC facilities entirely).^{48/} Here, by contrast, CLECs that do not wish to pay allegedly discriminatory tariffed rates for incumbents’ DSL service^{49/} already have an obvious alternative: Under the 1996 Act, they may purchase *unbundled* loops at cost-based rates and collocate necessary equipment in the incumbent’s central office. These rights — which CAPs lacked in 1992 — undermine any assertion of an unfair price squeeze in the DSL context, as the Commission already has concluded. *See GTOC Order* at ¶ 31.^{50/}

^{47/} *Expanded Interconnection with Local Telephone Company Facilities; Amendment of the Part 69 Allocation of General Support Facility Costs*, Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd 7369 (1992) (“*Special Access Order*”).

^{48/} *Id.* at ¶ 5.

^{49/} Covad at 16.

^{50/} For the same reasons, there is no basis to the claim that incumbents’ refusal to permit CLECs to lease a portion of the loop constitutes an unlawful tying arrangement. *See*

C. Section 706 Cannot Justify a Line-Sharing Requirement.

Finally, a few other CLECs assert that section 706 of the Act provides the requisite statutory authority for a line-sharing requirement.^{51/} That is plainly inconsistent with the Commission's prior view. When incumbent LECs petitioned for regulatory relief pursuant to section 706 in 1998, the Commission concluded that the provision "does not constitute an independent grant of . . . authority to employ other regulating methods," but rather "directs the Commission to use the authority granted in other provisions . . . to encourage the deployment of advanced services."^{52/}

In any event, the language of section 706 militates strongly *against* line sharing, as it calls for "*remov[ing]* barriers to infrastructure investment." Act § 706 (emphasis added).

Network Access Solutions at 14. That argument relies on the faulty premise that "the only realistic option for many residential consumers is to purchase the combined exchange/DSL package from the ILEC." *Id.* As shown above, there is no legitimate reason why a CLEC cannot offer a complete range of services over a loop (either on its own or in conjunction with another carrier), and, in any event, the success of data-only CLECs belies the suggestion that their service offerings are not "realistic" alternatives to those offered by incumbent LECs. *See supra* at 7-13.

Nor is Covad's reliance (at 35) on *Eastman Kodak v. Image Technical Servs.*, 504 U.S. 451 (1992), apposite. In that case, the Court affirmed the denial of Kodak's motion for summary judgment because substantial evidence indicated that Kodak had engaged in an unlawful tying scheme by flatly refusing to sell parts to buyers unless the buyer promised not to purchase service from an independent service provider. *Id.* at 453. Here, in addition to the fact that there are no inherently separate voice and data "capabilities," there is no basis for a claim that incumbent LECs are seeking to leverage market power in the provision of voice service by seeking to impose any restrictions or conditions. As shown above, a CLEC can provide data services on the same terms as the incumbent — *without* having to enter two markets — simply by partnering with a carrier that wants to provide competitive voice services. *See supra* at 12-14.

^{51/} See @Link Networks at 4; Commercial Internet Exchange Ass'n at 9-11.

^{52/} *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 13 FCC Rcd 24011, 24044-45, ¶ 69 (1998).

The costs associated with implementing a line-sharing requirement would hamper, rather than facilitate, the rollout of xDSL services.^{53/} Moreover, the Commission's analysis of section 706 in the *Advanced Services Report* would be flatly inconsistent with any requirement that forces incumbent LECs to bear additional unbundling (or related) obligations. There, the Commission decided *not* to grant competitive access to broadband facilities exclusively controlled by cable operators — the *market-leading* providers of advanced services — because “multiple methods of increasing bandwidth are or soon will be made available to a broad range of customers.”^{54/} If the presence of such competition undercuts the purported justification for mandating competitive access to cable modem facilities, *a fortiori* it warrants rejection of line sharing because, unlike incumbent cable operators, incumbent LECs *already* give competitors unbundled access to their basic transmission facilities at cost-based rates. AT&T's refusal to endorse line sharing in this proceeding speaks volumes on this point.

II. INCUMBENT LECS AND CLECS DEMONSTRATE THAT LINE SHARING WOULD CREATE “FORMIDABLE POLICY AND OPERATIONAL PROBLEMS.”

Many commenters agree that mandatory line sharing, while technically feasible, would be unwise policy. Every incumbent LEC commenter objects to the FNPRM's line-sharing proposal based on its adverse implications for the reliability of voice services, investment in facilities, and development of new technologies and competition. But the ILECs are by no means alone in their views. NEXTLINK, for example, opposes spectrum unbundling because it

^{53/} See Rural Telephone Coalition at 4.

^{54/} *Advanced Services Report* at ¶ 101.

would present “formidable policy and operational problems.”^{55/} AT&T similarly concludes that “mandatory allocation of frequencies within the same loop could raise significant policy and operational issues, stifle innovative uses of loop bandwidth, and produce no clear offsetting consumer benefits.”^{56/}

A. Many Commenters Agree That Line Sharing Would Make It Impossible for an Incumbent LEC To Assure the Quality or Reliability of Voice Service Provided over a Shared Loop.

CLECs concede that the version of line sharing they favor would entail a CLEC’s attachment of its *own* DSLAM to an unbundled loop.^{57/} By installing its own DSLAM, the CLEC would obtain control over any shared loop, because “[t]he DSLAM determines the basic character of the services provided”^{58/} and is the device that applies power to the loop. If a CLEC were to use a DSLAM to create HDSL, IDSL, or SDSL frequencies, that technology would preclude the provision of voice services, as both ALTS and Covad recognize.^{59/} Even if a CLEC agreed to create only ADSL frequencies (which permit the simultaneous provision of voice service), the incumbent would have no protection against the CLEC’s use of power in a manner

^{55/} NEXTLINK at 3. NEXTLINK does contend, however, that the Commission should adopt other measures to address what it considers to be discriminatory xDSL pricing by incumbent LECs. As shown in these comments, incumbents’ tariffs are not discriminatory, because CLECs have the same opportunities as incumbents to provide multiple services over a single loop.

^{56/} AT&T at 17.

^{57/} See, e.g., Covad at 6; NorthPoint at 22.

^{58/} USTA at 19; see also Covad at 5; NEXTLINK at 10.

^{59/} See ALTS at 13; Covad at 5.

that significantly degrades the incumbent's voice service.^{60/} As AT&T recognizes, "competitively neutral and nondiscriminatory spectrum management procedures still need to be developed [even] when advanced services are provided over *different* loops," and the industry has made no attempt whatever to address interference concerns "with respect to the more complicated shared line environment,"^{61/} in which interference would be expected to occur far more readily.^{62/}

Even if appropriate standards were developed, and if CLECs adhered to them, a CLEC could significantly degrade the incumbent's voice service if it caused "a short across the line conductors between the DSLAM and the voice switch" or "line faults" or as a result of maintenance or repair activity.^{63/} And the CLEC would have little or no incentive to take swift action to restore the incumbent LEC's voice service, particularly if the cause of the degradation, for example an increase in power at the DSLAM, were beneficial to the CLEC's data service.

Other competitive data providers also recognize that line sharing would constitute a significant "threat to the continued protection of voice and 911 services."^{64/} Prism Communication Services stresses the important point that "[u]nder no circumstances should the

^{60/} See BellSouth at 18 ("the CLEC would control the spectrum, without any regulatory controls, over which the incumbent LEC provides voice service to its customers").

^{61/} AT&T at 18 (emphasis in original).

^{62/} Compare NorthPoint at 18 (erroneously concluding that adherence with national standards designed to prevent interference on *adjacent* loops would "solve[] most plausible technical and operational issues").

^{63/} BellSouth at 18-19.

^{64/} Prism Communication Services at 13; *see also* NEXTLINK at 3, 8-10.

implementation of line sharing disrupt the consumer's regulated voice service."^{65/} Line sharing that permits a CLEC to install its own DSLAM necessarily would wrest control of the loop from the incumbent LEC, and therefore *would* pose a serious threat to residential voice services, including emergency services.

Covad attempts to divert the Commission's attention from this serious concern by asserting "there is essentially *no* technical difference between sending the digital traffic to a competitor's DSLAM and sending it to the ILEC's DSLAM."^{66/} It is indeed *technically feasible* to install a CLEC's DSLAM at the end of a loop; no incumbent contends otherwise. But there is a profound *operational* and *practical* difference between an incumbent's provision of voice service over a loop to which the incumbent has attached its own DSLAM, and over a loop for which a *CLEC's* DSLAM generates the loop spectrum. In the first case, the incumbent can assure that appropriate xDSL and voice frequencies are created and that power is applied in a manner that will not interfere with the provision of voice service. In the latter, the incumbent must provide voice service over frequencies defined and controlled by the CLEC, and would be powerless to prevent significant degradation of the voice service provided over those frequencies.

This key distinction explains why *ISPs'* resale of incumbent LECs' xDSL services does not compromise the incumbents' provision of voice services. As GTE notes, "[i]n the ILEC/ISP case, the ILEC maintains full control of the broadband transport arrangement."^{67/} The incumbent LEC attaches its own DSLAM to the loop and sells the ISP a finished service, not

^{65/} *Id.* at 14.

^{66/} Covad at 6 (emphasis in original).

^{67/} GTE at 29 n.59.

unbundled spectrum. Covad thus compares apples and oranges in asserting that incumbents' arrangements with ISPs somehow prove that line sharing with a *CLEC*, in which the CLEC would attach its own DSLAM, would present no operational problems.^{68/}

As U S WEST noted in its comments (U S WEST at 16), and several other commenters recognize,^{69/} the Commission appropriately concluded in the *Local Competition First Report and Order* that carriers should have “exclusive control over network facilities dedicated to particular end users.”^{70/} NEXTLINK, a leading competitive data provider, notes that the Commission “established the principle of exclusivity . . . after considerable debate.”^{71/} The Commission recognized that the purchase of unbundled loops entails burdens as well as benefits: A carrier “purchasing exclusive access to a local loop would have to provide all services demanded by the end user,”^{72/} either on its own or in conjunction with another carrier. Moreover, by statutory design such a carrier must “face[] the risk that end-user customers will not demand a sufficient number of services using that facility . . . to recoup its cost.”^{73/}

NEXTLINK correctly concludes that “[t]he CLECs advocating line-sharing as an unbundled element have asked that the Commission eliminate this risk by providing them access to a portion of an unbundled loop so they can compete for a part of the customer’s service

^{68/} See Covad at 7.

^{69/} See, e.g., Bell Atlantic at 7-8; BellSouth at 2-3; NEXTLINK at 7-9; SBC at 18.

^{70/} *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, 15693 ¶ 385 (1996) (“*Local Competition First Report and Order*”).

^{71/} NEXTLINK at 7.

^{72/} *Id.* at 8.

^{73/} *Local Competition First Report and Order*, 11 FCC Rcd at 15668, ¶ 334.

package, regardless of whether the customer's overall demands include other services, such as voice services."^{74/} This request is plainly "inconsistent with the Commission's determination that the purchase of an unbundled loop confers the benefit of exclusivity upon a carrier with the attendant burden that the carrier be able to satisfy the customer's overall telecommunication needs and recoup its investment."^{75/} The Commission made that determination not only in the *Local Competition First Report and Order*, but in defending its shared transport requirement in the Eighth Circuit, where it noted that, "'as a practical matter,' carriers that purchase unbundled loops assume responsibility for providing 'whatever services are requested by the customers to whom those loops are dedicated.'"^{76/} As NEXTLINK notes, "[t]he Commission was correct that allowing multiple carriers to access the same customer over the same facility [would] erode the exclusivity attached to an unbundled loop and create a conflict among the competing technical . . . requirements of the sharing carriers."^{77/}

B. Line Sharing Would Diminish Both Incumbents' and CLECs' Investment Incentives and Would Freeze Technology at Current Levels.

Many commenters recognize that line sharing would lessen both incumbents' and CLECs' incentives to invest in new and upgraded facilities. To begin with, a line-sharing requirement would deter incumbents from investing in loop plant, and thus slow deployment of

^{74/} NEXTLINK at 8.

^{75/} *Id.* at 8-9.

^{76/} Brief for Respondents at 36 n.14 (quoting *Local Competition First Report and Order*, 11 FCC Rcd at 15679, ¶ 357), *Southwestern Bell Telephone Co. v. FCC*, 153 F.3d 597 (8th Cir. 1998).

^{77/} *Id.* at 9.

advanced services, because incumbents would have a limited opportunity to recover the costs of such investments. As Bell Atlantic's comments explain:

[A]s long as the ILEC knows that it must lease its facilities at TELRIC rates, its incentive to invest in network upgrades required for DSL technology is severely attenuated [The] ILEC's incentives to invest in the requisite central-office facilities, line conditioning, and fixed marketing and distribution expenses are also reduced since the profitability of such a service is surely a function of its ability to offer DSL over the same lines as those used for current voice-grade services.^{78/}

Thus, incumbents are far less likely to invest in new facilities today if tomorrow they will be barred from maximizing the revenues derived from such facilities. For example, as BellSouth notes, the incentive for incumbents to invest in fiber-optic replacements for copper facilities would be "drastically reduced" if "the incumbent LEC [were] required to unbundle the spectrum and give a portion to its competitor, who shares none of the risk of deployment."^{79/} Indeed, ALTS freely admits that, if the situation were reversed, and an incumbent were "allowed to force CLECs to take just the 'voice frequencies' and then put the incumbent's own . . . DSL over that same loop," the incumbent LEC would "appropriate[] for itself a commercially valuable portion of a UNE" and accordingly give CLECs little reason "to make . . . major capital investments."^{80/}

A line-sharing requirement also would diminish CLECs' incentives to invest in alternatives to incumbent LEC facilities. Professor Kahn soundly concludes that line sharing would have a "fatal effect on the incentive or willingness of competitive carriers to construct their own facilities if they were able, by courtesy of regulators, to acquire the capability of

^{78/} Bell Atlantic at 4 (citing affidavit of Dr. Robert W. Crandall, Exh. A, ¶ 13).

^{79/} BellSouth at 14. *See also* GTE at 26-27.

^{80/} ALTS at 16.

offering the most lucrative, rapidly expanding and most innovation-dependent of their several services from their incumbent owners at prices equated to the very low (and conceivably zero) marginal costs of adding that capacity to their loops.”^{81/} If BellSouth is correct that CLECs see line sharing as a strategic opportunity to provide a full range of voice and data services over “unbundled” loop spectrum (using new voice over DSL technology) — while paying far less than the price of a whole loop — then the availability of line sharing almost certainly would dissuade CLECs from investing in alternative last-mile facilities.^{82/}

A related problem, as AT&T notes, is that, “[a]s technology advances, the utilization of the loop will . . . only reach its maximum potential if the full spectrum is available” to a single carrier.^{83/} For example, while ADSL “currently is not a fully overlapped technology[,] . . . [a]s multimedia applications proliferate, symmetrical data capabilities will be required, and next generation xDSL technologies will very likely employ fully overlapped upstream and downstream spectrum. Such development could be impeded if the prospect of subdivided loop spectrum ownership exists.”^{84/} NEXTLINK expresses a similar concern.^{85/} AT&T further explains that a CLEC using voice-over-DSL technology to provide data and voice services over a so-called “data channel” would waste part of the loop spectrum. By the same token, “a CLEC consigned to the allocated voice frequencies of the loop may devise innovative features

^{81/} Bell Atlantic at Exh. C (Kahn Reply Decl.), ¶ 22.

^{82/} See BellSouth at 15-16.

^{83/} AT&T at 19.

^{84/} *Id.* at 19-20.

^{85/} NEXTLINK at 10.

associated with its voice offering that would require additional spectrum beyond that achievable with the 4Khz assigned to voice” — spectrum that might not be available in a line-sharing regime.^{86/}

C. Line Sharing Raises Numerous OSS Problems That Would Require Complicated and Costly Solutions.

As AT&T recognizes, the line-sharing proposal raises serious questions of responsibility and accountability:

It is not clear which carrier would be responsible for the deployment and cost recovery of [filtering equipment]. Further, maintenance troubles on a line are frequently associated with the failure or degradation of a physical element. If two carriers are utilizing some, but not all, of the elements in a physical configuration, which one will be responsible for repair management, including customer contact, trouble isolation, and follow-up with the incumbent LEC? If a technician must be dispatched, it is not clear which carrier would be responsible for the costs of the dispatch.^{87/}

“The ultimate loser in this chaotic scenario would be the customer.”^{88/}

Even if the Commission were able to resolve these thorny operational questions — despite the dearth of guidance in the comments — a line-sharing requirement would impose significant costs, which CLECs (or the federal treasury) ultimately would have to bear.

Incumbents’ operational support systems are not equipped to accommodate multiple users of a loop. U S WEST inventories loops as whole elements, rather than according to the spectrum or services they support. Line sharing thus would require U S WEST to undertake the expense of

^{86/} AT&T at 20.

^{87/} *Id.* at 18.

^{88/} Bell Atlantic at 13.

making substantial changes to its ordering, installation, maintenance, and billing systems, as described below:

- *Ordering.* U S WEST would have to undertake significant development work to implement a new ordering process for an “unbundled” data channel. CLECs have insisted (with the encouragement of regulators) on standardized ordering forms, prompting incumbent LECs to rely on the Order and Billing Forum (“OBF”) to develop uniform documents. Before incumbent LECs could take orders for unbundled data frequencies, OBF would have to create a new ordering standard. Any attempt to create an ordering process before the OBF’s work is done would subject the incumbent to the costs of having to implement *two* new processes: one transitional, and one established by OBF.
- *Installation.* Enormous development work would be required to process installation orders such that a CLEC could provide data service over the same loop that U S WEST uses to provide voice service. When U S WEST obtains a new customer, it creates a customer service record (“CSR”) that includes a distinct cable and pair assignment. If the customer orders DSL service from U S WEST, the change order does not have any impact on the customer’s cable and pair assignment. But line sharing would require the tracking of *two* customers per loop — the end user and the CLEC that purchases access to the loop’s so-called data functionality — and existing CSRs do not permit two customers to share a single cable and pair assignment.
- *Maintenance and Repair.* U S WEST would have to redesign its repair systems as a result of line sharing. First, U S WEST would need to develop new processes to avoid the issuance of two repair tickets for a single problem. Two repair tickets could be issued if a customer (a) experienced an outage affecting both the voice and data services, or (b) contacted both U S WEST and the CLEC with requests for service. Second, U S WEST would need to redesign repair and maintenance systems because current systems do not allow two providers to serve a single facility. Third, U S WEST would need new processes to manage trouble tickets in a single repair flow. There are currently two repair flows: “POTS” and “design” services, and CLECs as a group presently can be assigned only to one or the other. Finally, U S WEST would need new processes for assessing repair charges to cover instances where a service problem affected a customer’s voice and data service.
- *Billing.* Incumbent LECs would have to engage in major overhauls of billing systems as a result of a line-sharing requirement. U S WEST would be required to redesign and rewrite all of its billing systems, at enormous expense, to deal with the fact that two customers would be associated with a single loop. For example, U S WEST’s billing system includes no billing code for an unbundled “data functionality.”

There is thus no basis for CLEC assertions that “processes for shared line access are practically indistinguishable from the ordering, billing, and provisioning of stand-alone loops.”^{89/} To the contrary, U S WEST estimates that necessary modifications would cost significantly more than the \$5 million figure put forth by GTE.^{90/} Indeed, every incumbent LEC commenter indicates that line sharing would require significant retooling of systems, the cost of which would outweigh any asserted benefits of line sharing.^{91/}

Moreover, some operational problems would be impossible for incumbent LECs to address unilaterally. For example, routine metallic loop tests, which require disabling of the ADSL service, could not be accomplished where the *CLEC*’s DSLAM powers the data service.^{92/} It remains to be seen how an incumbent LEC could perform critical testing where the CLEC has control of the DSLAM and might well resist interruption of its service.

CLECs also overlook the fact that all of these costs and difficulties likely would be for naught. By the time incumbent LECs could resolve the operational problems posed by line sharing, the asserted need for it almost certainly will have disappeared with the development of voice over DSL. Ameritech and SBC estimate that developing new OSS interfaces and procedures would take a minimum of two years.^{93/} The rapid pace of technological change

^{89/} NorthPoint at 22.

^{90/} See GTE at 28-29.

^{91/} See Ameritech at 10-12; Bell Atlantic at 10-13; BellSouth at 5; GTE at 29-31; SBC at 20-24.

^{92/} See Ameritech at 11; Bell Atlantic at 11-12.

^{93/} Ameritech at 8-9; SBC at 20.

would moot the purported justification for line sharing well before completion of the costly and time-consuming work needed to make it possible, because the ability to provide *packet-switched* voice service eliminates the concern that CLECs should not be required to invest in circuit-switched technology (*see* FNPRM ¶ 99).^{94/}

D. Line Sharing Also Would Present Intractable Cost Allocation and Pricing Problems.

No commenter has proposed a satisfactory solution to the FNPRM's queries regarding cost allocation and pricing in a line-sharing regime. ALTS, for example, urges allocation of "some" loop costs to the "data channel," but declines to advance any particular proposal. It suggests that "specific pricing determinations are reserved for state commissions."^{95/} But the state commissions have no answers: The California PUC, for example, says that "pricing and cost of line sharing is a 'can of worms,'" and "urges the FCC to apply blanket national rules."^{96/}

Some CLECs conclusorily suggest that the Commission should apply TELRIC pricing to a "shared-line UNE,"^{97/} under the theory that a CLEC should not pay for more of the loop than it actually uses. But common sense dictates that a CLEC should pay for a whole loop regardless of what services it chooses to provide (or not provide). CLECs' pay-only-for-what-you-use approach makes no more sense in the real world than establishing the price of a steak

^{94/} See BellSouth at 11.

^{95/} ALTS at 19-20.

^{96/} California PUC at 6.

^{97/} E.g., NorthPoint at 30-31; Rhythms at 12.

dinner based on how much of it the customer eats.^{28/} If loop costs were divisible, as CLECs propose, a customer purchasing voice and data services from U S WEST would pay less for voice service than a voice-only customer, as a result of using only part of the loop spectrum created by the DSL electronics attached to the loop. Even more problematic would be the pricing of services provided over digital loop carrier (“DLC”) systems: A loop’s “voice capability” arguably would cost the incumbent less if it consisted of end-to-end copper than a mix of copper and fiber, because only the former is capable of supporting DSL service. Plainly, incumbent LECs may not apply such an arbitrary and discriminatory pricing scheme to their voice services.

Moreover, as Professor Kahn demonstrates, basic economic principles reveal the fundamental incompatibility between TELRIC pricing and line sharing:

[W]here facilities are shared by two or more services, the incremental cost of service B is the difference between the cost of providing A on a stand-alone basis and the cost of providing A and B together. If, then, a loop is conceived of as making it possible to supply two services — basic dial tone and high speed-high capacity transmission of data — the T[E]LRIC of *either of them* would turn out to be close to zero if not actually zero, since any system set up to supply the other would already have incorporated the costs of the loop itself.^{29/}

^{28/} CLECs contend that, in the line-sharing context, the leftover steak — the voice frequencies they create — *is* worth every bit as much (or almost as much) as the whole steak, because it can be sold to the incumbent’s voice customers at full price. As shown in U S WEST’s comments (U S WEST at 26), however, incumbents would not assign *any* value to CLECs’ discarded frequencies, because of the serious risk of poor quality and reliability — just as a restaurant would not assign any value to a customer’s leftover food.

^{29/} Bell Atlantic at Exh. C (Kahn Reply Decl.), ¶ 15.

Thus, while CLECs such as Rhythms are correct insofar as they conclude that the “incremental cost of providing DSL services over a pre-installed, operational voice loop is . . . zero,”^{100/} the necessary corollary is that the incremental cost of providing voice services over a shared line *also* is zero. It would thus be untenable to price a data channel close to zero and impute all loop costs to the voice channel, when both channels have the same incremental cost.

Such an allocation of costs also would distort competition:

The simple fact of the matter is that if an incumbent local telephone company is to be required to bear the entire cost of providing a loop, capable of providing a wide variety of services — with the necessity of recovering the common costs from those several services rather than in a lump sum charge for dial tone alone — and is then required to offer the access that the loop provides to competitors for the provision of only some of these services, at — let us assume — zero incremental cost, it may well find itself under pressure of competition, incapable of recovering *any* of the common costs from the latter services.^{101/}

It is no answer for CLECs to assert that, because incumbent LECs presently impute no loop costs in pricing their own data services, CLECs should pay nothing for a data channel, either.^{102/} Their nondiscrimination rhetoric is inconsistent with basic economic principles. As Professor Kahn explains, “in competitive markets sellers do not price on the basis of ‘imputed’ common costs, when those costs must be recovered either in the form of fixed customer charges or on the basis of what the respective services produced with the aid of the inputs will bear.”^{103/} Competitive parity demands that incumbents and CLECs alike bear the

^{100/} Rhythms at 13.

^{101/} Bell Atlantic at Exh. C (Kahn Reply Decl.), ¶ 17.

^{102/} See Covad at 39; NorthPoint at 31; Rhythms at 13.

^{103/} Bell Atlantic at Exh. C (Kahn Reply Decl.), ¶ 17.

costs of a whole loop, “each recovering them in either of those two ways — not that one set of rivals be totally exempted from them, as proponents of what is deceptively labeled ‘line sharing’ would have it.”^{104/}

In addition, as U S WEST noted in its initial comments, seizing the vast economic potential associated with the so-called “data functionality” of a loop without providing any compensation whatever could subject the United States Treasury to massive takings liability.^{105/} Rhythms suggests that this risk is nonexistent, because where incumbent LECs “already pass through the cost of a voice grade copper loop to their customers each month,” any additional revenue would constitute an undeserved “double-recovery” and “windfall.”^{106/} Rhythms overlooks the fact that, in a competitive broadband marketplace, the Commission may not limit incumbents to mere recoupment of costs; incumbents are entitled to seek profits from all of their services (including DSL), just as CLECs are. Therefore, incumbents’ damages in a takings action would include opportunity costs, which indeed would be substantial.

E. Line Sharing Would Undermine Residential Voice Competition.

As several commenters recognize, line sharing would deal a serious blow to the Commission’s goal of promoting residential voice competition.^{107/} Data-focused CLECs seek to maximize their profits by providing advanced services without having either to resell voice services or forego use of the loop’s voice capabilities. If the Commission were to assist them in

^{104/} *Id.*

^{105/} U S WEST at 26.

^{106/} Rhythms at 13.

^{107/} *See, e.g.,* Bell Atlantic at Exh. C (Kahn Reply Decl), ¶ 19; GTE at 28.

this effort, it would give new entrants a further incentive to ignore residential voice customers altogether.^{108/} CLECs providing voice service already have concentrated on securing large business customers, and that trend certainly would continue if a large class of CLECs exited the voice business completely. In the absence of line sharing, data-focused CLECs would have strong incentives to partner with IXC's or other carriers that seek to provide voice service without paying the entire cost of a loop. Forcing incumbent LECs to take back a voice channel from such CLECs would undermine the incentive to forge such alliances, and consequently would eliminate an efficient means of spurring competition for both data *and* voice services.

NorthPoint inappropriately asserts that providing voice services merely “siphon[s] investment” away from broadband services.^{109/} What CLECs appear to seek instead is “to siphon off . . . the most lucrative [broadband] opportunities among the most attractive customers of the residential market.”^{110/} Contrary to NorthPoint’s casual dismissal, residential voice competition remains an important statutory objective — not a disfavored stepchild.

F. Line Sharing Would Greatly Exacerbate the Existing Regulatory Disparity that Results from the Commission’s Hands-Off Approach to Cable Operators’ Provision of Broadband Services.

Finally, commenters recognize that imposing an onerous line-sharing requirement on incumbent LECs would violate principles of competitive neutrality.^{111/} Although cable

^{108/} See Bell Atlantic at Exh. C (Kahn Reply Decl.), ¶ 19 (“mandatory spectrum sharing would have the . . . distressing consequence that it would eliminate any incentive on the part of competitive carriers to provide voice services”).

^{109/} NorthPoint at 14.

^{110/} GTE at 28 (citation omitted).

^{111/} See, e.g., Bell Atlantic at 6-7; BellSouth at 12-13.

operators have far more broadband customers than incumbent LECs, the Commission has refrained from imposing *any* unbundling obligations on those market leaders. Incumbent LECs, by contrast, *already* are required to give their competitors unbundled access to loops and other network elements. Whether or not regulators have been right to refrain from subjecting cable operators to an unbundling requirement, the Commission certainly should not exacerbate the existing regulatory disparity by requiring incumbent LECs not only to provide unbundled loops at TELRIC prices, but also to buy back unwanted frequencies created and defined by CLECs.

III. THE AGREEMENT OF SBC AND AMERITECH TO ACCEPT A LINE-SHARING REQUIREMENT AS A MERGER CONDITION IS NOT RELEVANT TO THIS PROCEEDING.

The line-sharing proposal included among the merger conditions recently agreed to by SBC and Ameritech should have no bearing on the question whether the Commission may or should impose a line-sharing requirement on other incumbent LECs in a *rulemaking*. SBC and Ameritech are willing to accede to a line-sharing requirement, subject to a three-year sunset,^{112/} because they have concluded that doing so is consistent with their goal of obtaining prompt approval of their proposed merger — a transaction whose benefits SBC and Ameritech apparently consider more substantial than the costs of the proposed conditions. SBC and Ameritech have not departed from their views that the Commission lacks authority to *require* line sharing and that a line-sharing mandate would cause numerous operational and administrative problems, including significant potential degradation of voice services.^{113/} To the

^{112/} *Conditions Proposed by SBC Communications, Inc. and Ameritech Corporation for Their Pending Application to Transfer Control*, CC Docket No. 98-141, DA 99-1305, at ¶¶ 34-38 (rel. July 1, 1999) (“*Proposed Conditions*”).

^{113/} See Ameritech at 1-12; SBC at 12-27.

contrary, the carriers preface the proposed merger conditions with the caveat that those provisions “go well beyond the requirements of the Telecommunications Act of 1996.”^{114/}

The Administrative Procedure Act (“APA”) makes clear that the Commission may not justify a line-sharing requirement on the ground that two incumbent LECs have “voluntarily” undertaken to engage in line sharing with competitors. The APA requires thorough and reasoned decision making. That requirement would be subverted if the Commission were to impose line sharing — in spite of the legal, factual, and policy-oriented flaws described above — simply because of a concession made in the context of negotiated merger conditions. The Commission’s obligation to engage in a reasoned analysis of line sharing is thus unaffected by the SBC/Ameritech merger proposal.

The condition requiring the merged SBC/Ameritech to sell unbundled loops at a 50% discount where it is able to engage in line sharing with its separate data affiliate^{115/} would be particularly problematic if the Commission were to impose it as a generally applicable measure. In the first place, such a requirement presupposes widespread adoption of a separate-subsidiary approach to the provision of advanced services — something that incumbents and CLECs alike have strongly opposed and that, in any event, the Commission has not required. In addition, a deep discount for data-only loops would give CLECs a powerful incentive not to offer voice

^{114/} Letter of Richard Hetke and Paul Mancini to Magalie Roman Salas at 2 (dated July 1, 1999); *see also id.* at 3 (conditions “greatly exceed the market-opening duties imposed by Congress”).

^{115/} *Proposed Conditions* at ¶ 34.

service,^{116/} and thus would have a severe anticompetitive impact on the residential voice market and would ultimately threaten universal service.

Finally, it is not clear that the merged SBC/Ameritech will permit line sharing anytime soon, or even at all, under the proposed condition. SBC and Ameritech have conditionally agreed to permit line sharing within three to twelve months of such time as

(a) it becomes technically feasible to provide line sharing as described in the [FNPRM] and in a manner that permits multiple CLECs to have access to a high frequency channel riding over the same loop as an SBC/Ameritech incumbent LEC-provided voice grade service, and (b) the equipment to provide such line sharing becomes available, based on industry standards, at commercial volumes.^{117/}

Technical obstacles might emerge during implementation, and there is no assurance that commercial volumes of the requisite equipment will be available. This uncertainty further confirms that the proposed SBC/Ameritech condition cannot serve as a basis for mandatory line sharing.

IV. THE COMMISSION SHOULD REJECT CLEC CALLS TO MICROMANAGE SPECTRUM COMPATIBILITY AND MANAGEMENT ISSUES.

Most commenters appropriately recognize that industry bodies such as the T1E1.4 working group should develop spectrum compatibility standards, with the Commission's role kept to a minimum. Some CLECs nevertheless urge the Commission to assume an activist posture in the standards-setting process and to substitute regulatory mandates for industry consensus and market incentives. ALTS, for example, opines that spectrum

^{116/} The 50% discount will be available *only* if the CLEC certifies that it will not provide voice service over the discounted loop. *See id.* at ¶ 34.

^{117/} *Id.* at ¶ 33.

compatibility and management issues cannot be “delegat[ed] . . . to any voluntary industry body.”^{118/} Covad similarly states that only the Commission’s intervention can save consumers from “the deliberate pace set by the lumbering incumbents.”^{119/} NorthPoint, apparently angered that a particular contribution to T1E1.4 was rejected, asks the Commission to replace that working group with “an independent body to develop, implement, and administer spectrum policy.”^{120/}

The Commission should reject these entreaties and adhere to its tentative conclusion that industry bodies such as T1E1.4 are the in the best position to develop spectrum compatibility standards. *See* FNPRM ¶¶ 79-80. As the Alliance for Telecommunications Industry Solutions (“ATIS”) recognizes, “a conclusion by the FCC that would keep the spectrum compatibility and spectrum management standards work in T1E1.4 would take advantage of the active standards development work that T1E1.4 already has underway and has had underway for some time.”^{121/} That work includes the development of spectrum compatibility criteria and deployment guidelines, including PSD masks, guarded systems, and quantitative expressions of the compatibility of new transmission technologies.

ATIS also confirms that there is no merit to CLEC allegations that incumbent LECs dominate the T1E1.4 working group. In fact, attendance at the working group’s meetings is heavily weighted toward equipment manufacturers, with incumbent LECs representing only

^{118/} ALTS at 23.

^{119/} Covad at 42.

^{120/} NorthPoint at 32.

^{121/} ATIS at 13-14.

about 15% of those present. Companies from other industry segments are encouraged to — and do — participate. As ATIS notes:

Committee T1 has established procedural safeguards to ensure that its standards processes operate fairly, that the standards it develops are reasonable, and that its members are not exposed to antitrust risks. Most importantly, membership and full participation in Committee T1 are open to all parties with a direct and material interest in Committee T1 process and activities. . . . ATIS ensures a balanced membership and participation without dominance by any single interest.^{122/}

In particular, the draft spectrum management standard recently released by T1E1.4 is the culmination of analysis by recognized experts representing varied interests.

Nor should the Commission dictate how incumbent LECs should manage their networks. Some CLECs call for the Commission to mandate the elimination of existing AMI T1 plant, which Covad deems “unacceptably ‘noisy.’”^{123/} However, “[m]oving live DS1 services from T1 carrier to another DS1 transmission system could cause more trouble than would result from leaving T1 carrier systems in place,” including “lengthy out-of-service interval[s]” and “the introduction of trouble that would [a]ffect service to other customers.”^{124/} As SBC notes, “[f]iber is not always an economic alternative to AMI T1, nor is it physically available in all instances, and ILECs must have the flexibility and leeway to determine what facilities best serve their customers, including AMI T1.”^{125/} In any event, “[m]ost AMI T1s are

^{122/} *Id.* at 5-6. *See also id.* at 19-22 (describing openness of T1E1.4 working group and “frequent efforts to broaden and increase participation at all levels of the Committee T1 organization”); Ameritech at 13-14; Bell Atlantic at 15; GTE at 6-7; Nortel at 5.

^{123/} *See* ALTS at 24; Covad at 49.

^{124/} Ameritech at 18.

^{125/} SBC at 11

used for business customers or large office buildings -- not residential customers,” and the fact that businesses are served by multiple binder groups means that some binder groups will be available for the provision of xDSL service to residential and business customers alike.^{126/} Therefore, as Sprint recognizes, “an ILEC should *not* be required to replace existing AMI T1s. Instead, market and technological drivers will be sufficient to cause a timely change.”^{127/}

At the same time that CLECs call for banning technologies deployed by incumbents, they seek relatively free rein to deploy untested, nonstandard technologies of their own — notwithstanding the threat of significantly degrading voice services. Covad, for example, proposes that CLECs be permitted to deploy unproven technologies “in two different areas, with up to fifty central offices and up to 5,000 subscriber lines in each area.”^{128/} That such a technology will have harmful effects only in a circumscribed area, however, does not justify tolerating such harm to consumers in the first place. For the same reason, the Commission should reject any proposal to grant carriers allocations of “permissible interference.”^{129/} PSD masks defined by T1E1.4 are the best means of managing spectrum interference. Those masks, paired with the calculation-based approach of the T1.413 model, are sufficiently flexible to warrant a requirement that CLECs deploy only *standard* technologies without prior testing.

^{126/} Bell Atlantic at 22.

^{127/} Sprint at 5 (emphasis added).

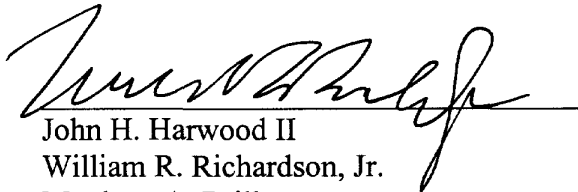
^{128/} Covad at 51.

^{129/} AT&T at 6.

CONCLUSION

For the reasons discussed above and in U S WEST's Comments, U S WEST urges the Commission to reject the line-sharing proposal and to allow industry groups and carriers to develop appropriate spectrum compatibility and management standards.

Respectfully submitted,



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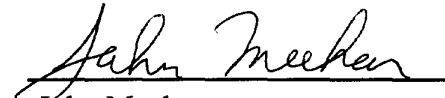
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July 22, 1999

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I HEREBY CERTIFY that on the 22nd day of July, 1999 I caused true and correct copies of the foregoing Reply Comments of U S WEST Communications, Inc. to be served either by hand or by first-class mail, postage pre-paid, upon the following:


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